



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/786,923

02/25/2004

Kang Soo Seo

1740-000086/US

4876

30593 7590 08/21/2007  
HARNESS, DICKEY & PIERCE, P.L.C.  
P.O. BOX 8910  
RESTON, VA 20195

EXAMINER

ADEGEYE, OLUWASEUN

ART UNIT

PAPER NUMBER

2621

MAIL DATE

DELIVERY MODE

08/21/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

Application No.

10/786,923

Applicant(s)

SEO ET AL.

Examiner

Oluwaseun A. Adegeye

Art Unit

2621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 02/25/2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1 - 23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 - 23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Priority*

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Claim Rejections - 35 USC § 101***

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 9 – 12 are rejected under 35 U.S.C. 101 because the claim language does not comply with MPEP 2106.01.I requirements.

### ***Claim Rejections - 35 USC § 102***

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 18 – 19 and 21 – 22 are rejected under 35 U.S.C. 102(e) as being anticipated by Mori et al (US 2002/0095531 A1).

As to claim 21, Mori discloses an apparatus for reproducing a recording medium, comprising:

first means for reproducing video data and additional data including graphic data and/or subtitle data recorded on the recording medium (see [80]);

second means for decoding the reproduced video data to construct a main plane and decoding the additional data to construct a plurality of planes (sub - picture and graphics) including presentation regions (see [80]); and

third means for constructing a video image by mixing the main plane with the plurality of planes and outputting the constructed video image (see [79] and [80]).

As to claim 18, this is a method claim corresponding to the apparatus claim 21. Therefore, claim 18 is analyzed and rejected as previously discussed with respect to claim 21.

As to claim to claim 22, Mori discloses the apparatus set forth in claim 21, wherein the second means organizes the additional data into a subtitle plane and a graphic plane (see [80]).

As to claim 19, this is a method claim corresponding to the apparatus claim 22. Therefore, claim 19 is analyzed and rejected as previously discussed with respect to claim 22.

3. Claims 6, 8, 11, 12, 15 and 17 are rejected under 35 U.S.C. 102(e) as being anticipated by Bauer-Schwan et al (US 7,187,852 B1).

As to claim 15, Bauer-Schwan discloses an apparatus for recording graphic/subtitle data on a recording medium (see column 2, lines 31 – 41), comprising:

first means for receiving video data and additional data including graphic data and/or subtitle data (see column 3, lines 12 – 44);

second means for organizing the additional data as a plurality of individual streams (column 3, lines 12 – 44 and fig. Fig. 1 discloses a plurality of video objects); and

third means for recording the additional data and the video data on the recording medium (see column 3, line 63 – column 4, line 25).

As to claim 6, this is a method claim corresponding to the apparatus claim 15. Therefore, claim 6 is analyzed and rejected as previously discussed with respect to claim 15.

As to claim 11, Bauer-Schwan discloses a high-density recording medium (DVD) having video data and additional data including graphic data and/or subtitle data, wherein the additional data is recorded as a plurality of individual streams (see column 2, lines 58 – 67 and column 3, lines 12 – 44).

As to claim 12, Bauer-Schwan discloses the high-density recording medium set forth in claim 11, wherein parts (navigation data) of the additional data that should be simultaneously decoded are placed in distinct streams (see column 3, lines 12 – 44 and fig. 1).

As to claim 17, Bauer-Schwan discloses the apparatus set forth in claim 15, wherein the second means places parts (navigation data) of the additional data that should be simultaneously decoded in distinct streams (see column 3, lines 12 – 44).

As to claim 8, this is a method claim corresponding to the apparatus claim 17. Therefore, claim 8 is analyzed and rejected as previously discussed with respect to claim 17.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1 – 2, 4 – 5, 9 – 10 and 13 – 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bauer-Schwan in view of Breen al (US 2004/0078822 A1).

As to claim 9, Bauer-Schwan discloses a high-density recording medium (DVD) having video data and additional data including graphic data and/or subtitle data, wherein the additional data is divided and organized in such a way that the additional data is included in a plurality of regions (see column 2, lines 58 – 67 and column 3, lines 12 – 44). Bauer-Schwan discloses video subtitle overlay information (see column 3, lines 38 – 40).

Bauer-Schwan does not disclose that graphic and/or subtitle will be overlaid on a video image constructed from the video data.

Breen discloses that graphic and/or subtitle will be overlaid on a video image constructed from the video data (see [006]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have added the step of overlaying graphic and/or subtitle on a video image as taught by Breen to the apparatus of Bauer-Schwan to provide a system

for delivering interactive content derived from a DVD to a remote site subscriber (see [001]).

As to claim 1, grounds for rejecting claim 9 apply to claim 1 in its entirety.

As to claim 13, this claim is similar to claim 15 only in that the limitation “second means for dividing and organizing the additional data in such a way that the additional data is included in a plurality of regions that will be overlaid on a video image constructed from the video data” is additionally recited. Bauer-Schwan discloses dividing and organizing the additional data in such a way that the additional data is included in a plurality of regions (see column 3, lines 12 – 44) but he does not disclose that graphic and/or subtitle will be overlaid on a video image constructed from the video data.

Breen discloses that graphic and/or subtitle will be overlaid on a video image constructed from the video data (see [006]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have added the step of overlaying graphic and/or subtitle on a video image as taught by Breen to the apparatus of Bauer-Schwan to provide a system for delivering interactive content derived from a DVD to a remote site subscriber (see [001]).

As to claim 2, Bauer-Schwan discloses the method set forth in claim 1, wherein the graphic data and subtitle data are organized into distinct regions (see column 3, lines 12 – 44). Breen also discloses that subpicture data includes graphic data and subtitles (see [006]).

As to claim 4, Breen discloses the method set forth in claim 1, wherein each of the plurality of regions includes at least one object (text) (see [006]).

As to claim 5, Breen discloses the method set forth in claim 4, wherein the object is text, an icon, an image, or a background box (see [006]).

As to claim 10, grounds for rejecting claim 2 apply to claim 10 in its entirety.

As to claim 14, this is an apparatus claim corresponding to the method claim 2. Therefore, claim 14 is analyzed and rejected as previously discussed with respect to claim 2.

5. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bauer-Schwan in view of Breen as applied to claims 1, 9 and 13 above, and further in view of Nanba (US 2003/0081931 A1).

As to claim 3, Bauer-Schwan in view of Breen discloses the method set forth in claim 1, but does not disclose wherein the plurality of regions do not overlap with each other on the video image. Nanba discloses wherein the plurality of regions do not overlap with each other on the video image (see [006], [011], [017] and [137]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have added the step of not overlapping the plurality of regions with each other on the video image as taught by Nanba to the apparatus of Bauer-Schwan in view of Breen to provide an easy-to-view display screen for users (see [42]).

6. Claims 7 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bauer-Schwan in view Mori.



As to claim 16, Bauer-Schwan discloses the apparatus set forth in claim 15 but does not disclose wherein the number of streams organized by the second means is the same as the number of graphic decoders included in the apparatus.

Mori discloses wherein the number of streams organized by the second means is the same as the number of graphic decoders included in the apparatus (see [80] and fig. 9. Each form of data has a separate decoder e.g. the highlight decoder decodes graphic data whereas the sub-picture decoder decodes sub-picture data).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to a separate decoder for each stream as taught by Mori to the device of Bauer-Schwan to provide a system that can correctly decode disc information, and all the display units performing display operations can display the same picture at the same time (see [009]).

As to claim 7, this is a method claim corresponding to the apparatus claim 16. Therefore, claim 7 is analyzed and rejected as previously discussed with respect to claim 16.

6. Claims 20 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mori in view of Breen.

As to claim 20, Mori discloses the method set forth in claim 19 but does not disclose wherein the subtitle plane includes decoded graphic data as well as decoded subtitle data.

Breen discloses wherein the subtitle plane includes decoded graphic data as well as decoded subtitle data (see [006]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include graphics data and subtitle data in the subtitle plane as taught by Breen to the device of Mori to provide a system for delivering interactive content derived from a DVD to a remote site subscriber (see [001]).

As to claim 23, grounds for rejecting claim 20 apply to claim 23 in its entirety.

### ***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US 2002/0081098 A1 discloses a plurality of decoders including a graphic decoder.

### ***Inquiries***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Oluwaseun A. Adegeye whose telephone number is 571-270-1711. The examiner can normally be reached on Monday - Friday 7:30 - 5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thai Tran can be reached on 571-272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2621

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

08/10/2007

O.A

*Mehrdad Dastouri*  
MEHRDAD DASTOURI  
SUPERVISORY PATENT EXAMINER  
TC 2600  
*for Thai Tran*